IN THE CLAIMS:

1   1. (Currently Amended) A method for selecting a coprocessor from a plurality of co-

2   processors to process a packet ~~of a predetermined size~~, the method comprising the steps

3   of:

4   <u>determining the size of the packet</u>;

5   determining a cost associated with the packet <u>of that size</u>, the cost representing a

6   load associated with processing the packet;

7   determining an anticipated load for each coprocessor in the plurality of coproces-

8   sors using the cost; and

9   selecting the coprocessor from the plurality of coprocessors based on the antici-

10   pated load.

1   2. (Original) The method of claim 1 wherein the step of determining a cost further com-

2   prising the step of:

3   calculating the cost using a rate associated with processing the packet.

1   3. (Original) The method of claim 2 wherein the rate is stored in a lookup table.

1   4. (Original) The method of claim 2 wherein the step of calculating the cost further

2   comprising the step of:

3   dividing the packet's size by the rate.

1   5. (Original) The method of claim 2 wherein the step of calculating the cost further

2   comprising the step of:

3   multiplying the packet's size by a multiplicative inverse of the rate.

1   6. (Original) The method of claim 1 wherein the step of determining a cost further com-

2   prising the step of:

3   applying the packet's size to a lookup table containing one or more cost values to

4   determine the cost.

1   7. (Original) The method of claim 1 wherein the step of determining an anticipated load

2   further comprising the step of:

3   adding the cost to a cumulative load associated with each coprocessor in the plu-

4   rality of coprocessors.

1   8. (Original) The method of claim 1 wherein the step of selecting the coprocessor fur-

2   ther comprising the step of:

3   selecting the coprocessor from a group of one or more coprocessors whose antici-

4   pated load is a minimum load.

1   9. (Original) The method of claim 8 wherein the coprocessor is selected using a schedul-

2   ing algorithm.

1   10. (Original) The method of claim 1 wherein the step of selecting the coprocessor fur-

2   ther comprising the step of:

3   determining if a port associated with the packet is congested.

1   11. (Original) The method of claim 10 wherein the step of selecting the coprocessor fur-

2   ther comprising the step of:

3   selecting the coprocessor from a group of one or more coprocessors whose antici-

4   pated load is not a minimum load.

1   12. (Original) The method of claim 10 wherein the step of selecting the coprocessor fur-

2   ther comprising the step of:

3   selecting the coprocessor from a group of one or more coprocessors whose antici-

4   pated load is a minimum load.

1   13. (Original) The method of claim 1 further comprising the step of:

2   incrementing a cumulative load associated with the selected coprocessor.

1   14. (Original) The method of claim 13 wherein the step of incrementing a cumulative

2   load further comprising the step of:

3   adding the cost to the cumulative load.

1   15. (Original) The method of claim 1 further comprising the step of:

2   decrementing a cumulative load associated with the selected coprocessor.

1   16. (Original) The method of claim 15 wherein the step of decrementing a cumulative

2   load further comprising the steps of:

3   subtracting the cost from the cumulative load.

1   17. (Currently Amended) An apparatus for selecting a coprocessor from a plurality of

2   coprocessors to process a packet ~~of a predetermined size~~, the apparatus comprising:

3   a memory containing one or more software routines, including a software routine .

4   configured to determine <u>the size of the packet,</u> a cost associated with the packet <u>of that</u>

5   <u>size,</u> the cost representing a load associated with processing the packet; and

6   a processor configured to execute the software routines to determine an antici-

7   pated load for each coprocessor in the plurality of coprocessors using the cost and to se-

8   lect the coprocessor from the plurality of coprocessors based on the anticipated load.

1   18. (Original) The apparatus of claim 17 further comprising:

2   a data structure;

3   wherein the cost is determined using information contained in the data structure.

1   19. (Original) The apparatus of claim 18 wherein the information contained in the data

2   structure includes the cost.

1   20. (Original) The apparatus of claim 18 wherein the information contained in the data

2   structure includes a rate the coprocessor can process the packet.

1   21. (Currently Amended) An intermediate device configured to select a coprocessor

2   from a plurality of coprocessors to process a packet ~~of a predetermined size~~, the interme-

3   diate device comprising:

4   means for determining the size of the packet, a cost associated with the packet of

5   that size, the cost representing a load associated with processing the packet;

6   means for determining an anticipated load for each coprocessor in the plurality of

7   coprocessors using the cost; and

8   means for selecting the coprocessor based on the anticipated load.

1   22. (Currently Amended) A computer readable media comprising:

2   the computer readable media containing computer executable instructions for execution

3   in a processor for the practice of a method for selecting a coprocessor from a plurality

4   of coprocessors to process a packet ~~of a predetermined size~~, the method comprising the

5   steps of:

6   determining the size of the packet, a cost associated with the packet of that size,

7   the cost representing a load associated with processing the packet;

8   determining an anticipated load for each coprocessor in the plurality of coproces-

9   sors using the cost; and

10   selecting the coprocessor from the plurality of coprocessors based on the antici-

11   pated load.

1   23. (New)   A method for selecting a processor for processing a packet, the method

2   comprising the steps of:

3   determining the size of the packet;

4   determining a cost associated with the packet of that size, the cost representing a

5   load associated with processing the packet;

6   determining an anticipated load for the processor using the cost of the packet if

7   processed by the processor;; and

8   selecting the processor based on the anticipated load.

1   24. (New)   The method of claim 23 wherein the step of determining a cost.comprises

2   the step of calculating the cost using a rate associated with the processing of the packet;

3   wherein the rate is stored in a lookup table.

1   25. (New)   The method of claim 23 wherein the step of determining a cost further

2   comprises the step of applying the size of the packet to a lookup table containing cost

3   values for determining cost.

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